ORIGINAL



MEMORANDUM

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FROM:

Thomas M. Broderick

Director

Utilities Division

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2016 JAN -8 P 3: 18

AZ CORP COMMISSION DOCKET CONTROL

DATE:

January 8, 2016

RE:

STAFF REPORT FOR CHAPARRAL WATER PROPERTIES, INC. DBA

CHAPARRAL WATER COMPANY'S APPLICATION FOR AN INCREASE IN

ITS RATES (DOCKET NO. W-02393A-15-0349)

Attached is the Staff Report for Chaparral Water Properties, Inc. dba Chaparral Water Company's ("Chaparral" or "Company") application for an increase in its rates. Staff recommends approval of the rate application using Staff's recommended rates and charges.

Any party who wishes may file comments to the Staff Report with the Commission's Docket Control by 4:00 p.m. on or before January 19, 2016.

TMB:TDP:red/RWG

Originator: Tanya Pitre

Arizona Corporation Commission DOCKETED

JAN 08 2016

DOCKETED BY

Service List for: Chaparral Water Properties, Inc. Docket No. W-02393A-15-0349

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STAFF REPORT UTILITIES DIVISION ARIZONA CORPORATION COMMISSION

CHAPARRAL WATER PROPERTIES, INC.

DOCKET NO. W-02393A-15-0349

APPLICATION FOR AN INCREASE IN ITS RATES

STAFF ACKNOWLEDGMENT

The Staff Report for Chaparral Water Prosperities, Inc. ("Chaparral" or "Company") Docket No. W-02393A-15-0349 was the responsibility of the Staff members listed below. Tanya Pitre was responsible for the review and analysis of the Company's application, recommended revenue requirement, rate base and rate design. Jian Liu was responsible for the engineering and technical analysis. Trish Meeter was responsible for reviewing customer complaints filed with the Commission.

Tanya Pitre

Public Utilities Analyst I

Jian Liu

Utilities Engineer – Water/Wastewater

Trish Meeter

Consumer Analyst II

EXECUTIVE SUMMARY CHAPARRAL WATER PROPERTIES, INC. DOCKET NO. W-02393A-15-0349

On October 9, 2015, Chaparral Water Properties, Inc. dba Chaparral Water Company ("Chaparral" or "Company") filed an application with the Arizona Corporation Commission ("Commission") for a permanent rate increase. On November 9, 2015, Staff filed a letter declaring the application sufficient.

Chaparral is a for profit "C" Corporation and a Class E public service corporation serving potable water to approximately 296 customers. Chaparral is located approximately one mile west of Grand Ave, near Patton Road and 203rd Ave, in the Phoenix metropolitan area.

Chaparral proposed a revenue increase \$56,749 or 40.98 percent over test year revenues of \$138,470 to \$195,219 as shown on Schedule TDP-1, page 2. The Company's proposed original cost rate base ("OCRB") is \$133,210. The Company's proposed rates would increase the typical residential 5/8 x 3/4-inch meter bill with a median usage of 6,697 gallons from \$26.04 to \$35.99, for an increase of \$9.95, or 38.2 percent.

Staff recommends a revenue increase of \$41,706 or 30.12 percent over test year revenues of \$138,470 to \$180,176. Staff recommends an OCRB of \$133,002. Staff's recommended rates would increase the typical residential $5/8 \times 3/4$ -inch meter bill with a median usage of 6,697 gallons from \$26.04 to \$34.44, for an increase of \$8.40, or 32.3 percent.

STAFF RECOMMENDS:

- 1. The Commission approve the Staff-recommended rates and charges as shown on Schedule TDP-4.
- 2. In addition to collection of its regular rates and charges, the Company may collect from its customers a proportionate share of any privilege, sales or use tax, per Arizona Administrative Code ("A.A.C.") Rule 14-2-409(D)(5).
- 3. The Company be ordered to file with Docket Control, as a compliance item in this Docket, a tariff schedule of its new rates and charges within 30 days after the effective date of the Decision in this proceeding.
- 4. The Company continue to use the depreciation rates presented in Table H-1 of the attached Engineering report.
- 5. The Company use the service line and meter installation charges proposed in Table K-1 of the attached Engineering report.
- 6. Staff recommends that Chaparral, as a compliance item in this case, notify its customers of the authorized rates and charges approved in this proceeding, and their effective date, in a form acceptable to Staff, by means of an insert in its next regular

scheduled billing and to file copies with Docket Control within 10 days of the date notice is sent to customers.

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Chaparral Water Properties, Inc. Docket No. W-02393A-15-0349 Page 1

FACT SHEET

Company Statistics:

Current rates: Decision No. 71833 dated August 10, 2010.

Type of ownership: "C" Corporation.

Location: The Company is located approximately one mile west of Grand Ave, near Patton Road and 203rd Ave. The Company is located in the Phoenix Active Management Area ("AMA") in Maricopa County, Arizona.

Rates:

Permanent rate increase application filed: October 9, 2015.

Current test year ended: December 31, 2014. Application found Sufficient: November 9, 2015.

Prior test year ended: June 30, 2009.

	Current	Company Proposed	Staff Recommended
Minimum monthly charge: $5/8 \times 3/4$ inch meter	<u>Rates</u> \$13.25	<u>Rates</u> \$23.00	<u>Rates</u> \$20.25
Commodity charge (per 1,000 gallons):			
From 0 to 7,000 gallons	\$1.91	n/a	n/a
From 7,001 to 15,000 gallons	2.40	n/a	n/a
15,000 and over	3.00	n/a	n/a
From 0 to 3,000 gallons	n/a	\$1.25	\$1.65
From 3,001 to 10,000 gallons	n/a	2.50	2.50
10,000 and over	n/a	4.25	3.75
Typical 5/8 inch meter residential bill:			
Average use (10,293 gallons)	\$34.52	\$45.49	\$43.80
Median use (6,697 gallons)	26.04	35.99	34.44

Chaparral Water Properties, Inc. Docket No. W-02393A-15-0349 Page 2

Customers:

The average number of customers for Chaparral for test year ended December 31, 2014: 296

Customer notification:

An Affidavit of Mailing was filed on October 26, 2015. Notice was mailed to each customer on October 8, 2015.

Complaints:

No. of customer complaints January 1, 2012 through December 16, 2015:

2015 - One Complaint (billing), One Opinion opposed to this application

2014 - Two Complaints (one billing, one disconnection)

2013 - Four Complaints (two billing, one quality of service, one repair)

2012 - One Complaint (quality of service)

All complaints have been resolved and closed.

SUMMARY OF FILING

The test year results, as adjusted by Utilities Division Staff ("Staff"), for Chaparral Water Properties, Inc. dba Chaparral Water Company ("Chaparral" or "Company") show total operating revenue of \$138,470 and an operating loss of \$4,859 on an original cost rate base ("OCRB") of \$133,002 for no rate of return as shown on Schedule TDP-1, Page 1.

Chaparral's proposed rates, as filed, would produce total operating revenue of \$195,219 and an operating income of \$34,769, for a 17.81 percent operating margin. The Company's proposed rates would increase the typical 5/8 inch meter residential bill, with a median usage of 6,697 gallons from \$26.04 to \$35.99 for an increase of \$9.95 or 38.2 percent as shown on Schedule TDP-5.

Staff's recommended rates would produce total operating revenue of \$180,176 and operating income of \$28,170, for a 15.63 percent operating margin. Staff's recommended rates would increase the typical 5/8 inch meter residential bill, with a median usage of 6,697 gallons from \$26.04 to \$34.44 for an increase of \$8.40 or 32.3 percent as shown on Schedule TDP-5.

COMPANY BACKGROUND

Chaparral is a C Corporation certificated by the Arizona Corporation Commission ("Commission") to provide water service in Arizona, pursuant to Decision No. 52362, dated August 1, 1981. Chaparral is located approximately one mile west of Grand Ave, near Patton Road and 203rd Ave, in the Phoenix metropolitan area. At test year end, Chaparral serviced approximately 296 residential customers.

On October 9, 2015, Chaparral filed an application with the Commission for a permanent rate increase. On November 9, 2015, Staff filed a letter declaring the application sufficient and classified the Company as a class E public service corporation.

The Company states that its requested rate relief is necessary due to the increased cost of asset replacement, maintenance and operating costs.

CONSUMER SERVICES

Complaints and Opinions

A search of Consumer Services database revealed the following history of customer complaints and opinions.

- 2015 One Complaint (billing), One Opinion opposed to this application
- 2014 Two Complaints (one billing, one disconnection)
- 2013 Four Complaints (two billing, one quality of service, one repair)
- 2012 One Complaint (quality of service)

All complaints have been resolved and closed.

Chaparral Water Properties, Inc. Docket No. W-02393A-15-0349 Page 4

A review of the Company's bill format indicates compliance with Rules R14-2-409.B.2.a thru R14-2-409.B.2.j of the Arizona Administrative Code ("A.A.C."), Title 14, Chapter 2.

COMPLIANCE

A check of the Compliance Database indicates that there are currently no delinquencies for Chaparral. The Company is current on its property tax obligations.

ENGINEERING ANALYSIS

Staff inspected the Company's plant facilities on December 7, 2015. The facilities consist of four wells, producing approximately 330 gallons per minute ("GPM"). The system also has six storage tanks, and a distribution system serving 296 customers during the test year. A complete discussion of Staff's technical findings and recommendations and a description of the water system are provided in the attached Staff Engineering Report.

Staff recommends using the depreciation rates shown on Table H-1 of the Staff Engineering Report.

Chaparral has an approved Backflow Prevention tariff on file with the ACC.

Chaparral has an approved Curtailment plan tariff on file with the ACC.

RATE BASE

Staff's rate base adjustments result in a net decrease to the Company's proposed rate base by \$208 from \$133,210 to \$133,002, due to Staff's adjustment to working capital as shown in Schedule TDP-2, page 1. The details of Staff's adjustment is explained below.

<u>Plant in Service</u> – Staff audited the Company's proposed plant in service balance of \$463,580 and recommends adoption as shown on Schedule TDP-2, page 2.

<u>Accumulated Depreciation</u> – Staff audited the Company's proposed accumulated depreciation balance of \$332,735 and recommends adoption as shown on Schedule TDP-2, page 3.

Working Capital – This adjustment decreases the Company's proposed cash working capital by \$208 from \$13,923 to \$13,715. The Company calculated a working capital allowance using the formula method which is one twenty-fourth of purchased power expense and one-eighth of operations and maintenance expense less depreciation using proposed expenses in its calculation. Staff's calculation used the same formula after giving consideration to the Staff adjusted test year expenses it is recommending as shown on Schedule TDP-3, page 1.

OPERATING INCOME STATEMENT

Operating Revenue

Staff tested and accepted the Company's total operating revenue of \$138,470.

Operating Expenses

Staff's five adjustments to operating expenses resulted in a net decrease of \$4,859 as shown on Schedule TDP-3, page 1. Details of Staff's adjustments are presented below.

<u>Water Testing – Adjustment No. 1</u> increases this account by \$61, from \$2,743 to \$2,804 as shown on Schedule TDP-3, pages 1 and 2, to reflect Staff Engineer's recommended expense level.

Rate Case Expense – Adjustment No. 2 decreases this account by \$1,875, from \$7,500 to \$5,625 as shown on Schedule TDP-3, pages 1 and 2. The Company stated in its response to Staff's first set of data requests that it did not expect rate case expense to exceed \$22,500. Therefore, Staff normalized the \$22,500 using four years resulting in annual rate case expense of \$5,625.

<u>Depreciation Expense – Adjustment No. 3</u> decreases this account by \$2,724, from \$14,722 to \$11,998, as shown on Schedule TDP-3, pages 1 and 2, to reflect application of Staff's recommended depreciation rates¹ to Staff's recommended plant balances.²

<u>Property Tax Expense – Adjustment No. 4</u> decreases this account by \$326, from \$6,178 to \$5,852 as shown on Schedule TDP-3, pages 1 and 2, to reflect property taxes calculated using Staff's modified Arizona Department of Revenue methodology.

<u>Income Tax Expense –Adjustment No. 5</u> increases this account by \$1,340, from \$150 to a negative \$1,190, to reflect Staff's calculation of the income tax obligation on Staff's adjusted test year taxable income, as shown on Schedule TDP-1, page 3.

REVENUE REQUIREMENT

Staff recommends total operating revenue of \$180,176, a \$41,706 or 30.12 percent increase over the test year revenues of \$138,470 as shown on Schedule TDP-1, page 1. Staff believes that its recommended cash flow provides ample funds to meet the Company's operating needs.

RATE DESIGN

Schedule TDP-4 presents a complete list of the Company's present, proposed, and Staff's recommended rates and charges.

¹ Shown on Table H-1 of the attached Engineering Report

² Shown on Schedule TDP - 2, page 2

Chaparral Water Properties, Inc. Docket No. W-02393A-15-0349 Page 6

The Company's current rate structure is comprised of three tiers, with a first-tier break-over of 7,000 gallons; 15,000-gallons for the second-tier; and over 15,000-gallons for the third-tier. The Company proposes to retain a three tiered rate structure, but proposes to change the break over points. The Company's suggested changes are as follows, first-tier break-over of 3,000 gallons; 10,000-gallons for the second-tier; and over 10,000-gallons for the third tier.

Staff agrees with the Company to maintain a three tiered rate structure for its rates and to change the tier break-over points as proposed in its application.

Miscellaneous Service Charges

NSF Check – Chaparral proposed an increase of \$10.00, from \$15.00 to \$25.00 for a NSF check charge. The Company did not support the increase and agreed to leave the NSF charge at \$15.00.

<u>Establishment Charge</u> – Chaparral proposed an increase of \$5.00, from \$25.00 to \$30.00 for an Establishment Charge. Staff recommends an Establishment Charge of \$35.00 as a reasonable request, recognizing the additional work required when opening new service, yet keeping in alignment with the recommended Reconnection (delinquent) Service Charge.

Reconnection (Delinquent) Charge – Chaparral proposed to retain the Reconnection (delinquent) Service Charge of \$50.00. Staff requested Company support for this \$50.00 Reconnection (delinquent) Charge. In response, Company supported the request because the current rate acts as a deterrent to reconnections due to delinquent accounts. Company data shows 74 disconnections resulting in the same number of reconnections in the 2014 test year.

Staff concludes that it is appropriate to apply a Reconnection (delinquent) Charge for expenses required to provide service reconnections. Staff recommends elimination of the Current \$50.00 Reconnection (delinquent) Charge and denial of the proposed \$50.00 Reconnection (delinquent) Charge. Staff recommends a Charge of \$40.00 for this service so as not to exceed the charges for similar work requiring a field visit and align more closely with the Establishment Charge.

After Hours Service Charge (at customers request) – Chaparral proposed to add a new After Hours service charge (at customers request) of \$35.00. An additional fee for service provided after normal business hours is appropriate when such service is at the customer's request or for the customer's convenience. Such a tariff compensates the utility for additional expenses incurred from providing after-hours service.

Moreover, it is appropriate to apply an after-hours service charge in addition to the charge for any utility service provided after hours at the customer's request or for the customer's convenience. For example, under Staff's proposal, a customer would be subject to a \$40 Establishment fee if it is done during normal business hours, but would pay an additional \$35 after-hours fee if the customer requested that the establishment be done after normal business hours.

SERVICE LINE AND METER INSTALLATION CHARGES

The Company has requested changes to its service line and meter installation charges as shown on Schedule TDP-4.

The Company has proposed separate service line and meter installation charges. This is appropriate since the Company may at times install meters on existing service lines, which would allow for some customers to only be charged for the meter installation. Therefore, Staff recommends approval of the Company's proposed separate service line and meter installation charges as shown on Schedule TDP-4.

STAFF RECOMMENDS:

- 1. The Commission approve the Staff-recommended rates and charges as shown on Schedule TDP-4.
- 2. In addition to collection of its regular rates and charges, the Company may collect from its customers a proportionate share of any privilege, sales or use tax, per A.A.C. Rule 14-2-409(D)(5).
- 3. The Company be ordered to file with Docket Control, as a compliance item in this Docket, a tariff schedule of its new rates and charges within 30 days after the effective date of the Decision in this proceeding.
- 4. The Company continue to use the depreciation rates presented in Table H-1 of the attached Engineering report.
- 5. The Company use the service line and meter installation charges proposed in Table K-1 of the attached Engineering report.
- 6. Staff recommends that Chaparral, as a compliance item in this case, notify its customers of the authorized rates and charges approved in this proceeding, and their effective date, in a form acceptable to Staff, by means of an insert in its next regular scheduled billing and to file copies with Docket Control within 10 days of the date notice is sent to customers.

SUMMARY OF FILING

	Company	Staff	Company	Staff
	as Filed	as Adjusted	Proposed	Recommended
Revenues:				
Metered Water Revenue	#124201	#12.4.204	#404 440	*****
Unmetered Water Revenue	\$134,391	\$134,391	\$191,140	\$176,097
	0	0	0	0
Other Water Revenues	4,079	4,079	4,079	4,079
Total Operating Revenue	\$138,470	\$138,470	\$195,219	\$180,176
Operating Expenses:				
Operation and Maintenance	\$128,483	\$126,669	¢120 402	#10/ //O
Depreciation	ŕ		\$128,483	\$126,669
-	14,722	11,998	14,722	11,998
Property & Other Taxes	6,178	5,852	8,481	6,440
Income Tax	150	(1,190)	8,764	6,900
Total Operating Expense	\$149,533	\$143,329	\$160,450	\$152,006
Operating Income/(Loss)	(\$11,063)	(\$4,859)	\$34,769	\$28,170
•				
Rate Base O.C.L.D.	\$133,210	\$133,002	\$133,210	\$133,002
Rate of Return - O.C.L.D.	N/M	N/M	26.10%	21.18%
Operating Margin	N/M	N/M	17.81%	15.63%

REVENUE REQUIREMENT

<u> </u>			
		1 1 2.3	· · · · · · · · · · · · · · · · · · ·
		[A]	[C]
l		COMPANY	STAFF
LINE		ORIGINAL	ORIGINAL
NO.	DESCRIPTION	COST	COST
1	Adjusted Rate Base	\$133,210	\$133,002
			,
2	Adjusted Operating Income (Loss)	(\$11,063)	(\$4,859)
		(, , , ,	(") /
3	Current Rate of Return (L2 / L1)	-8.30%	-3.65%
	, ,		
4	Required Rate of Return	26.10%	21.18%
	•		
5	Required Operating Income (L4 * L1)	\$34,769	\$28,170
	1 1 8 (=-/	# - 1 , 1 - 2	4-0,2 70
6	Operating Income Deficiency (L5 - L2)	\$45,832	\$33,029
	· · · · · · · · · · · · · · · · · · ·	¥ 13,032	ΨJJ,027
7	Gross Revenue Conversion Factor	1.2382	1.2627
	5-500 2-5, 5140 3007 52000 1 4000	1.2302	1.2027
8	Required Revenue Increase (L7 * L6)	\$56,749	\$41, 706
Ü	required revenue merease (17 130)	Ψ30,/ τ	Ψ1,/00
9	Adjusted Test Year Revenue	\$120 47A	\$120 47O
,	Adjusted Test Teat Revenue	\$138,470	\$138,470
10	Proposed Annual Revenue (L8 + L9)	¢105 210	\$100.17 <i>C</i>
10	1 roposed Alliuai Revenue (Lo + L9)	\$195,219	\$180,176
11	Dogwins d In arrass in Dossay (9/)	40.000/	20.400/
11	Required Increase in Revenue (%)	40.98%	30.12%

GROSS REVENUE CONVERSION FACTOR

F=		_	r	·
LINE NO.	DESCRIPTION	[A]	[B]	[C]
	Calculation of Gross Revenue Conversion Factor.			
1	Revenue	100.0000%		
2	Uncollectible Factor (Line 11)	0.0000%		
3	Revenues (L1 - L2)	100.0000%		
4	Combined Federal and State Tax Rate (L17) + Property Tax Factor (L22)	20.8066%		
5	Subtotal (L3 - L4)	79.1934%	•	
6	Revenue Conversion Factor (L1 / L5)	1.262732		
	Calculation of Uncollectible Factor:			
7	Unity	100.0000%		
8	Combined Federal and State Tax Rate (L17)	19.6750%		
9	One Minus Combined Income Tax Rate (L7 - L8)	80.3250%		
10	Uncollectible Rate	0.0000%		
11	Uncollectible Factor (L9 * L10)	0	,	
	Calculation of Effective Tax Rate:			
12	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%		
13	Arizona State Income Tax Rate	5.5000%		
14	Federal Taxable Income (L12 - L13)	94.5000%		
15	Applicable Federal Income Tax Rate (L44)	15.0000%		
16	Effective Federal Income Tax Rate (L14 * L15)	14.1750%		
17	Combined Federal and State Income Tax Rate (L13 + L16)			
17	Combined Federal and State Income 12x Nate (L15 + L16)	19.6750%		
0.1	Calculation of Effective Property Tax Factor			
21	Property Tax Factor	1.4088%		
22	Effective Property Tax Factor (L21 * L22)	1.1316%		
23	Combined Federal and State Tax and Property Tax Rate (L17 + L22)	20.8066%		
24	Required Operating Income	\$28,170		
25	Adjusted Test Year Operating Income (Loss)	(4,859)		
26	Required Increase in Operating Income (L24 - L25)	\$33,029		
27	Income Taxes on Recommended Revenue (Col. [D], L52)	\$6,900		
28	Income Taxes on Test Year Revenue (Col. [B], L52)	(1,190)		
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)	\$8,090		
30	Recommended Revenue Requirement	£100 177		
31	•	\$180,176		
32	Uncollectible Rate (L10)	0.0000%		
33	Uncollectible Expense on Recommended Revenue (L24 * L25)	\$ 0		
34	Adjusted Test Year Uncollectible Expense Required Increase in Revenue to Provide for Uncollectible Exp. (L32 - L33)	\$0 \$0		
35	Property Tax with Recommended Revenue	\$6,440		
36 37	Property Tax on Test Year Revenue Increase in Property Tax Due to Increase in Revenue	5,852 \$588		
	include in respect y and Due to include in research			
38	Total Required Increase in Revenue (L26 + L30 + L34 + L37)	\$41,706		
				STAFF
	Calculation of Income Tax:	Test Year		Recommended
39	Revenue	\$138,470	\$41,706	\$180,176
40	Operating Expenses Excluding Income Taxes	144,519	588	145,106
41	Synchronized Interest (L47)	0	•••	0
42	Arizona Taxable Income (L36 - L37 - L38)	(\$6,049)		\$35,070
43	Arizona State Income Tax Rate	5.5000%		5.5000%
44	Arizona Income Tax (L39 * L40)	(\$333)		\$1,929
45	Federal Taxable Income (L33 - L35)	(5,716)		33,141
46	Federal Tax on First Income Bracket (\$1 - \$50,000) @ 15%	(857)		4,971
47	Federal Tax on Second Income Bracket (\$50,001 - \$75,000) @ 25%	(637)		4,9/1
48	Federal Tax on Third Income Bracket (\$75,001 - \$100,000) @ 25% Federal Tax on Third Income Bracket (\$75,001 - \$100,000) @ 34%	0		0
	, , , , , , , , , , , , , , , , , , ,			
49 50	Federal Tax on Fourth Income Bracket (\$100,001 - \$335,000) @ 39% Federal Tax on Fifth Income Bracket (\$335,001, \$10,000,000) @ 34%	0		0
	Federal Tax on Fifth Income Bracket (\$335,001 -\$10,000,000) @ 34%	0		0
51 52	Total Federal Income Tax Combined Federal and State Income Tax (L35 + L42)	(\$857) (\$1,190)		\$4,971 \$6,900
53	Applicable Federal Income Tax Rate ((Col. [D], L42 - Col. [B], L42) / (Col. [C], L36 - Col. [A],			15.00%
	Calculation of Interact Conchronination			
54	Calculation of Interest Synchronization: Rate Base	\$133,002		
55	Weighted Average Cost of Debt			
56	Synchronized Interest (L45 * L46)	0.00%		
30	Synchronized finerest (143 · 1240)	\$0		

ORIG	INAL COST RATE B	ASE	
	Origina	al Cost	
	Company	Adjustment	Staff
Plant in Service	\$463,580	\$0	\$463,580
Less:			
Accum. Depreciation	332,735	0	332,735
Net Plant	\$130,845	\$0	\$130,845
Less:			
Plant Advances	\$0	\$ 0	\$0
Security Deposits	8,874	* -	8,874
Meter Deposits	2,684	0	2,684
Total Advances	\$11,558	\$0	\$11,558
Contributions Gross	\$0	\$0	\$0
Amortization of CIAC	0	0	(
Net CIAC	\$0	\$0	\$0
Total Deductions	\$11,558	\$0	\$11, 558
Plus:			
1/24 Power	\$1,059	\$ O	\$1,059
Prepayments		-	_
Total Additions	\$13,923	(\$208)	\$13,715
Rate Base	\$133,210	(\$208)	\$133,002

PLANT ADJUSTMENT

	Acct.	Company		Staff
No.	No. Description	Exhibit	Adjustment	Adjusted
1	301 Organization Costs	\$0	\$0	\$0
2	302 Franchise Costs	0	0	0
3	303 Land & Land Rights	17,000	0	17,000
4	304 Structures & Improvements	73,989	0	73,989
5	307 Wells & Springs	36,106	0	36,106
6	310 Power Generation Equipment	0	0	0
7	311 Electric Pumping Equipment	48,735	0	48,735
8	320 Water Treatment Equipment	0	0	0
9	320.1 Water Treatment Plants	749	0	749
10	320.2 Solutions & Feeders	0	0	0
11	320.3 Point-of-Use Treatment Devices	0	0	0
12	330 Distribution Reservoirs & Standpipes	0	0	0
13	330.1 Storage Tank	116,118	0	116,118
14	330.2 Pressure Tanks	0	0	0
15	331 Transmission & Distribution Mains	87,022	0	87,022
16	333 Services	44,646	0	44,646
17	334 Meters & Meter Installations	20,119	0	20,119
18	335 Hydrants	0	0	0
19	336 Backflow Prevention Devices	0	0	0
20	339 Other Plant & Misc. Equip.	0	0	0
21	340 Office Furniture & Fixtures	467	0	467
22	340.1 Computer & Software	12,079	0	12,079
23	341 Transportation Equipment	0	0	0
24	342 Store Equipment	0	0	0
25	343 Tools & Work Equipment	0	0	0
26	344 Laboratory Equipment	6,550	0	6,550
27	345 Power Operated Equipment	0	0	0
31	105 C.W.I.P.	0	0	0
32	TOTALS	\$463,580	\$0	\$463,580

	RATE BASE ADJUSTMENT - ACCUMULATED DEPRECIATION					
LINE	ACCT.		[A] COMPANY	[B]	[C] STAFF	
NO.		SCRIPTION	AS FILED	ADJUSTMENT	ADJUSTED	
1		ranization Costs	\$0	\$0	\$0	
2	-	nchise Costs	0	0	0	
3	303 Lan	d & Land Rights	0	0	0	
4	304 Stru	ictures & Improvements	58,880	0	58,880	
5		ls & Springs	36,106	0	36,106	
6		ver Generation Equipment	0	0	0	
7		ctric Pumping Equipment	23,634	0	23,634	
8	320 Wat	er Treatment Equipment	0	0	0	
9	320.1 Wa	ater Treatment Plants	749	0	749	
10	320.2 So.	lutions & Feeders	0	0	0	
11	320.3 Po	int-of-Use Treatment Devices	0	0	0	
12	330 Dist	ribution Reservoirs & Standpipes	0	0	0	
13	330.1 Sto	orage Tank	88,019	0	88,019	
14	330.2 Pre	essure Tanks	0	0	0	
15	331 Tran	nsmission & Distribution Mains	47,483	0	47,483	
16	333 Serv	rices	44,646	0	44,646	
17	334 Met	ers & Meter Installations	17,100	0	17,100	
18	335 Hyd	rants	0	0	0	
19	336 Back	xflow Prevention Devices	0	0	0	
20	339 Oth	er Plant & Misc. Equip.	0	0	0	
21	340 Offi	ce Furniture & Fixtures	109	0	109	
22	340.1 Com	nputer & Software	12,079	0	12,079	
23	341 Tran	sportation Equipment	0	0	0	
24	342 Store	e Equipment	0	0	0	
25	343 Tool	ls & Work Equipment	0	0	0	
29	347 Misc	tellaneous Equipment	0	0	0	
30	348 Oth	er Intangibles	0	0	0	
31	105 C.W	.I.P.	0	0	0	
32	Accı	ımulated Depreciation	\$332,735	\$0	\$332,735	

CHAPARRAL WATER PROPERTIES Docket No. W-02393A-15-0349

Test Year Ended 12/31/2014

STATEMENT OF TEST YEAR OPERATING INCOME

L		STATEMENT OF T	EST YEAR	OPERATING	INC	OME		
			[A]	[B]		[C]	[D]	(E)
Line	Acct.		Company	Staff	Adj.	Staff	Staff	Staff
No.	No.	Description	Exhibit	Adjustments	No.	Adjusted	Adjustments	Recommended
1	Revenue	es:	• • • • • • • • • • • • • • • • • • • •				Tajasaments	recommended
2	461	Metered Water Revenue	\$134,391	\$0		\$134,391	\$41,706	\$176,097
3	460	Unmetered Water Revenue	0	0		0	0	0
4	474	Other Water Revenues	4,079	0		4,079	0	4,079
5	Total	Operating Revenue	\$138,470	\$0		\$138,470	\$41,706	\$180,176
6						,	. ,	,
7	Operatio	ng Expenses:						
8	601	Salaries and Wages	\$0	\$0		\$0	\$0	\$0
9	610	Purchased Water	0	0		0	0	0
10	615	Purchased Power	25,425	0		25,425	0	25,425
11	618	Chemicals	2,351	0		2,351	0	2,351
12	620	Repairs and Maintenance	24,265	0		24,265	0	24,265
13	621	Office Supplies and Expense	2,662	0		2,662	0	2,662
14	630	Outside Services	55,622	0		55,622	0	55,622
15	635	Water Testing	2,743	61	1	2,804	0	2,804
16	641	Rents	0	0		0	0	0
17		Transportation Expenses	0	0		0	0	0
18	657	Insurance - General Liability	2,569	0		2,569	0	2,569
19		Insurance - Health and Life	0	0		0	0	0
20		Regulatory Commission Expense - Rate Case	7,500	(1,875)	2	5,625	0	5,625
21		Customer Security Deposit Interest	147	0		147	0	147
22		Miscellaneous Expense	5,199	0		5,199	0	5,199
23		Depreciation Expense	14,722	(2,724)	3	11,998	0	11,998
24		Taxes Other Than Income	0	0		0	0	0
25		Property Taxes	6,178	(326)	4	5,852	\$588	6,440
26		Income Tax	150	(1,340)	5	(1,190)	8,090	6,900
30	OPERA	TING INCOME/(LOSS)	(\$11,063)	\$6,204		(\$4,859)	\$33,029	\$28,170

	STAFF ADJUSTMENTS		
Adjustment No. 1	WATER TESTING - Per Company Per Staff	\$2,743 2,804	\$61
	rei Stail		φ01
	This adjustment increases water testing expense by \$61 to refle testing expense as discussed in greater detail in the attached En		ter
Adjustment No. 2	REGULATORY COMMISSION EXPENSE - RATE CASE		
	- Per Company	\$ 7,500	
	Per Staff	5,625	(\$1,875)
	Staff recommened Rate Case expense Normalized using 4 years 4 \$5,625	Per Data Request TDP	1-10
	This adjustment decreases rate case expense by \$1,825 to reflect	et Staff's recommended ex	pense level
Adjustment No. 3	DEPRECIATION EXPENSE - Per Company	\$14,722	
	Per Staff	11,998	(\$2,724)
	To reflect Staff's calculation of depreciation expense as shown	on Schedule TDP-3, Page	3 of 4.
Adjustment No. 4	PROPERTY TAXES - Per Company Per Staff	\$6,178 5,852	(\$326)
	To reflect Staff's calculation of property taxes as shown on Sch	edule TDP-3, Page 4 of 4	
Adjustment No. 5	INCOME TAX - Per Company	\$150	(\$1,340)
*	Per Staff	(1,190)	

To reflect Staff's calculation of income taxes as shown on Schedule TDP-2, Page 1 of 2.

OPERATING INCOME ADJUSTMENT No. 3 - DEPRECIATION EXPENSE

Line No.	Acct. No. Description	[A] Utility Plant in Service Balances	[B] Fully/Non-Depreciable Plant Balances	[C] Depreciable Plant	[D] Deprec.	[E] Depreciation
	Plant In Service	service Daiances	Plant Dalances	In Service	Rate	Expense
1	301 Organization Costs	\$0	\$0	\$0	0.00%	\$0
2	302 Franchise Costs	0	0	0	0.00%	0
3	303 Land & Land Rights	17,000	0	17,000	0.00%	0
4	304 Structures & Improvements	73,989	0	73,989	3.33%	2,464
5	307 Wells & Springs	36,106	36,106	0	3.33%	
6	310 Power Generation Equipment	0	0	0	5.00%	0
7	311 Electric Pumping Equipment	48,735	14,760	33,975	12.50%	4,247
8	320 Water Treatment Equipment	0	,	,		.,
9	320.1 Water Treatment Plants	749	749	0	3.33%	0
10	320.2 Solutions & Feeders	0	0	0	20.00%	0
11	320.3 Point-of-Use Treatment Devices	0	0	0	10.00%	0
12	330 Distribution Reservoirs & Standpipes	0		0		
13	330.1 Storage Tank	116,118	0	116,118	2.22%	2,578
14	330.2 Pressure Tanks	0	0	0	5.00%	0
15	331 Transmission & Distribution Mains	87,022	0	87,022	2.00%	1,740
16	333 Services	44,646	44,646	0	3.33%	0
17	334 Meters & Meter Installations	20,119	16,728	3,391	8.33%	282
18	335 Hydrants	0	0	0	2.00%	0
19	336 Backflow Prevention Devices	0	0	0	6.67%	0
20	339 Other Plant & Misc. Equip.	0	0	0	6.67%	0
21	340 Office Furniture & Fixtures	467	0	467	6.67%	31
22	340.1 Computer & Software	12,079	12,079	0	20.00%	0
23	341 Transportation Equipment	0	0	0	20.00%	0
24	342 Store Equipment	0	0	0	4.00%	0
25	343 Tools & Work Equipment	0	0	0	5.00%	0
29	347 Miscellaneous Equipment	0	0	0	10.00%	0
30	348 Other Intangibles	0	0	0	10.00%	0
31						
32						
33	Subtotal General	\$463,580	\$125,068	\$338,512	_	\$11,998
34					_	
44	Staff Recommended Depreciation Expense					\$11,998
45	Company Proposed Depreciation Expense					14,722
46	Increase/(Decrease) to Depreciation Expense				_	(\$2,724)

OPERATING INCOME ADJUSTMENT No. 4 - PROPERTY TAXES

		[A]	[B]
Line		Staff	Staff
No.	Description	As Adjusted	Recommended
1	Staff Adjusted Test Year Revenues	\$138,470	\$138,470
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	\$276,940	\$276,940
4	Staff Recommended Revenue	138,470	180,176
5	Subtotal (L4 + L5)	\$415,410	\$457,116
6	Number of Years	3	3
7	Three Year Average (L5 / L6)	\$138,470	\$152,372
8	Department of Revenue Multiplier	2	2
9	Revenue Base Value (L7 * L8)	\$276,940	\$304,744
10	Plus: 10% of CWIP	0	0
11	Less: Net Book Value of Licensed Vehicles	0	0
12	Full Cash Value (L9 + L10 - L11)	\$276,940	\$304,744
13	Assessment Ratio	18.00%	18.00%
14	Assessment Value (L12 * L13)	\$49,849	\$54,854
15	Composite Property Tax Rate - Obtained from ADOR	11.74%	11.74%
16	Staff Test Year Adjusted Property Tax Expense (L14 * L15)	\$5,852	
17	Company Proposed Property Tax	6,178	
18	Staff Test Year Adjustment (L16 - L17)	(\$326)	
19	Property Tax - Staff Recommended Revenue (L14 * L15)		\$6,440
20	Staff Test Year Adjusted Property Tax Expense (L16)		5,852
21	Increase in Property Tax Due to Increase in Revenue Requirement		\$588
22	Increase in Property Tax Due to Increase in Revenue Requirement (L21)		\$588
23	Increase in Revenue Requirement		\$41,706
24	Increase in Property Tax Per Dollar Increase in Revenue (L22 / L23)		1.408800%

CHAPARRAL WATER PROPERTIES Docket No. W-02393A-15-0349 Test Year Ended 12/31/2014

	RATE DESIGN		
3.5 11 T	Present	Company	Staff
Monthly Usage Charge	Rates	Proposed Rates	Recommended Rates
5/8" x 3/4" Meter	\$13.25	\$23.00	#20. 2
3/4" Meter	19.28		\$20.2
1" Meter	32.50	34.50 57.50	30.30
1½" Meter	64.25		50.6
2" Meter	103.50	115.00 184.00	101.2
3" Meter	205.60		162.0
4" Meter	321.25	368.00 575.00	324.0
6" Meter	642.50		506.2
8" Meter	042.30 N/A	1,150.00	1,012.50
o Meter	IN/A	N/A	1,620.00
Commodity Rates			<u> </u>
All Meter Sizes			
Gallons Included in Minimum	0	0	0
0-7,000 Gallons	\$1.91	N/A	0
7,001-15,000 Gallons	2.40	N/A N/A	N/A
Over 15,000 Gallons	3.00	N/A N/A	N/A
2 . 22 20,000 000000	3.00	IN/A	N/A
5/8" X 3/4" Meter - Residential	ļ.		
Gallons Included in Minimum	0	0	0
0-3,000 Gallons	N/A	\$1.25	\$1.65
3,001-10,000 Gallons	N/A	2.50	2.50
Over 10,000	N/A	4.25	3.75
5/8" X 3/4" Meter - Commercial & Industrial	,		3.75
Gallons Included in Minimum		_	
0-3,000 Gallons	0	0	0
	N/A	\$1.25	N/A
3,001-10,000 Gallons	N/A	2.50	N/A
Over 10,000	N/A	4.25	N/A
From 0 to 10,000 Gallons	N/A	N/A	\$2.50
Over 10,000	N/A	N/A	3.75
3/4" Meter - Residential			
Gallons Included in Minimum	0		^
Excess of Minimum - per 1,000 Gallons	"	0	0
0-3,000 Gallons	N/A	¢1 25	@4 ZF
3,001-10,000 Gallons	N/A N/A	\$1.25 2.50	\$1.65
Over 10,000			2.50
O (CI 10,000	N/A	4.25	3.75

From 0 to 50,000 Gallons

Over 50,000

P	ATE DESIGN CONT.		
3/4" Meter - Commercial & Industrial	ATE DESIGN CONT.		
Gallons Included in Minimum	0	0	0
0-3,000 Gallons	N/A	\$1.25	N/A
3,001-10,000 Gallons	N/A	2.50	N/A
Over 10,000	N/A	4.25	N/A
From 0 to 10,000 Gallons	N/A	N/A	\$2.50
Over 10,000	N/A	N/A	3.75
1" - Residential, Commercial, & Industrial			
Gallons Included in Minimum	0	0	0
0-3,000 Gallons	N/A	\$1.25	N/A
3,001-10,000 Gallons	N/A	2.50	N/A
Over 10,000	N/A	4.25	N/A
From 0 to 10,000 Gallons	N/A	N/A	\$2.50
Over 10,000	N/A	N/A	3.75
1½" - Residential, Commercial, & Industrial	_		
Gallons Included in Minimum	0	0	0
0-3,000 Gallons	N/A	\$1.25	N/A
3,001-10,000 Gallons Over 10,000	N/A	2.50	N/A
Over 10,000	N/A	4.25	N/A
From 0 to 10,000 Gallons	N/A	N/A	\$2.50
Over 10,000	N/A	N/A	3.75
2" - Residential, Commercial & Industrial			
Gallons Included in Minimum	0	0	0
0-3,000 Gallons	N/A	\$1.25	N/A
3,001-10,000 Gallons	N/A	2.50	N/A
Over 10,000	N/A	4.25	N/A
From 0 to 10,000 Gallons	N/A	N/A	\$2.50
Over 10,000	N/A	N/A	3.75
3" - Residential, Commercial & Industrial Gallons Included in Minimum			
0-3,000 Gallons	0	0	0
3,001-10,000 Gallons	N/A	\$1.25	N/A
Over 10,000 Gallons	N/A	2.50	N/A
•	N/A	4.25	N/A
From 0 to 10,000 Gallons	N/A	N/A	\$2.50
Over 10,000	N/A	N/A	3.75
" - Residential, Commercial & Industrial			
Gallons Included in Minimum	0	0	0
0-3,000 Gallons	N/A	\$1.25	N/A
3,001-10,000 Gallons	N/A	2.50	N/A
Over 10,000	N/A	4.25	N/A

N/A

N/A

N/A

\$2.50

3.75

Docket No	o. W-02393A-15-0349
	Ended 12/31/2014

		RATE	DESIGN	CONT.					
6" - Residential, Commercial & Industria	-1			ı			1		
Gallons Included in Minimum	<u>a1</u>		0						
Excess of Minimum - per 1,000 Gallo			0			0			0
0-3,000 Gallons	ns		DT / A			24.25			
3,001-10,000 Gallons			N/A			\$1.25			N/A
			N/A			2.50			N/A
Over 10,000			N/A			4.25			N/A
From 0 to 80,000 Gallons			N/A			N/A			\$2.50
Over 80,000			N/A			N/A			3.75
8" - Residential, Commercial & Industria	al								
Gallons Included in Minimum	_		0			0			0
Excess of Minimum - per 1,000 Gallo	ns					Ü			O
0-3,000 Gallons			N/A			\$1.25			N/A
3,001-10,000 Gallons			N/A			2.50	ĺ		N/A
Over 10,000			N/A			4.25			N/A
From 0 to 110,000 Gallons			N/A			N/A			\$ 0.50
Over 110,000 Gallons				į.				\$2.50	
Over 110,000 Gallons			N/A			N/A			3.75
Standpipe (Per 1,000 Gallons)			3.00			4.25			3.75
		Presen	t		Compar	ıy	l	Staff	
		Rates		Proposed Rates			Recommended Rates		
Service Line and Meter Installation C	harges	<u></u>	T						
			<u> </u>						
	Service Line	Meter	Total	Service	Meter	Total	Service	Meter	Total
5/8" x 3/4" Meter	\$445	Charge	Charge	Line	Charge	Charge	Line	Charge	Charge
3/4" Meter	445	\$155 255	\$600	\$445	\$155	\$600	" "	\$155	\$600
1" Meter	495				255	700	445	255	700
1½" Meter	550		810		315	810	495	315	810
2" Turbine Meter	0	1	1,075		525	1,075	550	525	1,075
2" Meter	1		1 1075	0	0	0	800	995	1,795
3" Turbine Meter	880	1,095	1,975	830	1,890	2,720	830	1,890	2,720
3" Meter	1 100	1 700	2.000	1165	0	0	1,015	1,620	2,635
4" Turbine Meter	1,100	1,700	2,800		2,545	3,710	1,165	2,545	3,710
4" Meter	1 500	2770	4250	1 (70	0	0	1,430	2,570	4,000
	1,580	2,770	4,350	1 1 1	3,645	5,315	1,670	3,645	5,315
	_ ^		1 0	l 04	6,920	6,920	2,150	4,925	7,075
6" Turbine Meter	0	E 440	~		,				
6" Turbine Meter 6" Meter 8" and larger	2,410 At Cost	5,440 At Cost	7,850 At Cost			9,250 At Cost	2,330 At Cost	6,920	9,250 At Cost

RATE DESIGN CONT.							
Service Charges	Present Rates	Company Proposed	Staf Recommended				
Establishment	\$25.00	\$30.00	\$35.00				
Establishment (After Hours)	50.00	N/A	N/A				
After Hours Service Charge (At customers request)	N/A	35.00	35.00				
Reconnection (Delinquent)	50.00	50.00	40.00				
Meter Test (If Correct)	25.00	25.00	25.00				
Deposit	*	*	:				
Deposit Interest	**	**	**				
Re-Establishment (Within 12 Months)	***	***	**				
NSF Check	15.00	25.00	15.00				
Deferred Payment (Per R14-2-409.G.6)	1.50%	1.50%	1.50%				
Meter Re-Read (If Correct)	15.00	20.00	15.00				
Monthly Service Charge for Fire Sprinkler							
4" or Smaller	****	****	***				
6"	****	****	***				
8"	****	****	***				
10"	****	****	***				
Larger than 10"	****	****	***				

^{*} Per Commission Rule A.A.C. R-14-2-403(B)(7).

In addition to the collection of regular rates, the utility will collect from its customers a proportionate share of any privilege, sales, use, and franchise tax. Per Commission Rule A.A.C. 14-2-409D(5)

^{**} Per Commission Rule A.A.C. R-14-2-403(B)(3).

^{***} Number of months off system times the monthly minimum A.A.C. R14-2-403(D).

^{**** 2%} of Monthly Minimum for a comparable sized meter connection, but no less than \$10.00 per month. The service charge for fire sprinklers is only applicable to service lines separate and distinct from the primary water service line

CHAPARRAL WATER PROPERTIES Docket No. W-02393A-15-0349 Test Year Ended 12/31/2014

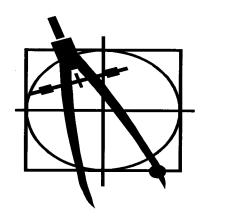
TYPICAL BILL ANALYSIS General Service 5/8 x 3/4-Inch Meter

Average Number of Customers: 296

Company Proposed	Gallons	Present Rates	oposed Rates	Dollar Increase	Percent Increase
Average Usage	10,293	\$ 34.52	\$ 45.49	\$ 10.97	31.8%
Median Usage	6,697	\$ 26.04	\$ 35.99	\$ 9.95	38.2%
Staff Recommend					
Average Usage	10,293	\$ 34.52	\$ 43.80	\$ 9.27	26.9%
Median Usage	6,697	\$ 26.04	\$ 34.44	\$ 8.40	32.3%

Present & Proposed Rates (Without Taxes) General Service 5/8 x 3/4-Inch Meter

		Company		Staff	
Gallons	Present	Proposed	%	Recommended	%
Consumption	Rates	Rates	<u>Increase</u>	<u>Rates</u>	<u>Increase</u>
0	\$13.25	\$23.00	73.6%	\$20.25	52.8%
1,000	15.16	24.25	60.0%	21.90	44.5%
2,000	17.07	25.50	49.4%	23.55	38.0%
3,000	18.98	26.75	40.9%	25.20	32.8%
4,000	20.89	29.25	40.0%	27.70	32.6%
5,000	22.80	31.75	39.3%	30.20	32.5%
6,000	24.71	34.25	38.6%	32.70	32.3%
7,000	26.62	36.75	38.1%	35.20	32.2%
8,000	29.02	39.25	35.3%	37.70	29.9%
9,000	31.42	41.75	32.9%	40.20	27.9%
10,000	33.82	44.25	30.8%	42.70	26.3%
15,000	45.82	65.50	43.0%	61.45	34.1%
20,000	60.82	86.75	42.6%	80.20	31.9%
25,000	75.82	108.00	42.4%	98.95	30.5%
50,000	150.82	214.25	42.1%	192.70	27.8%
75,000	225.82	320.50	41.9%	286.45	26.8%
100,000	300.82	426.75	41.9%	380.20	26.4%
125,000	375.82	533.00	41.8%	473.95	26.1%
150,000	450.82	639.25	41.8%	567.70	25.9%
175,000	525.82	745.50	41.8%	661.45	25.8%
200,000	600.82	851.75	41.8%	755.20	25.7%
,					



Engineering Report for: Chaparral Water Company Application for a Rate Increase Docket No. W-02393A-15-0349

By: Jian W Liu Utilities Engineer

December 9, 2015

EXECUTIVE SUMMARY

CONCLUSIONS:

- 1. The Arizona Department of Environmental Quality ("ADEQ") or its formally delegated agent, the Maricopa County Environmental Services Department ("MCESD"), reported that the Chaparral Water Company ("Chaparral" or "Company") Public Water System ("PWS") No. 07-064, is currently delivering water that meets water quality standards required by 40 C.F.R. 141 (National Primary Drinking Water Regulations) and Arizona Administrative Code, Title 18, Chapter 4. (MCESD report dated October 28, 2015).
- 2. The Company is located in the Phoenix Active Management Area ("AMA") and is subject to Arizona Department of Water Resources ("ADWR") AMA reporting and conservation requirements. ADWR reported that Company is not in compliance with departmental requirements governing water providers and/or community water systems. (ADWR compliance status report dated November 24, 2015).
- 3. A check with the Arizona Corporation Commission ("ACC" or "Commission") Utilities Division Compliance Section showed no delinquent compliance items for the Company. (ACC Compliance Section Email dated December 9, 2015).
- 4. The Company has approved Curtailment Plan and Backflow Prevention Tariffs on file with the Commission.
- 5. ACC Utilities Division Staff ("Staff") concludes that the Chaparral water system has adequate production capacity and storage capacity to serve the existing customer base and reasonable growth.
- 6. The Company reported 38,720,000 gallons pumped and 37,439,000 gallons sold, resulting in a water loss of 3.31 percent for the test year. Non-account water is within acceptable limits.

RECOMMENDATIONS:

1. Staff recommends annual water testing expense of \$2,804 be used for purposes of this application.

- 2. In the prior rate case, the Company adopted Staff's typical and customary water depreciation rates. These rates are presented in Table H-1 and it is recommended that the Company continue to use these depreciation rates by individual National Association of Regulatory Utility Commissioners category.
- 3. The Company has proposed changes to its service line and meter installation charges. These charges are refundable advances and the Company's proposed charges are within Staff's recommended range for these charges. Staff recommends acceptance of the Company proposed charges in Table K-1.
- 4. Staff recommends that any increase in rates and charges approved in this proceeding not become effective until the first day of the month following the Company's filing of an updated ADWR Compliance Status Report indicating that the Company is in compliance with ADWR requirements.

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A. INTRODUCTION AND LOCATION OF THE COMPANY

On October 9, 2015, Chaparral Water Company ("Chaparral" or "Company") filed an application with the Arizona Corporation Commission ("ACC" or "Commission") for approval of a rate increase with a test year ending December 31, 2014, in Docket No. W-02393A-15-0349. The ACC Utilities Division Staff ("Staff") engineering review and analysis of the application are presented in this report.

Chaparral is located approximately one mile west of Grand Ave, near Patton Road and 203rd Ave, in the Phoenix metropolitan area. Chaparral served 296 customers at the end of the test year. Figure A-1 shows the location of the Company within Maricopa County and Figure A-2 shows the one square mile certificated area.

B. DESCRIPTION OF WATER SYSTEM

The water system was field inspected on December 7, 2015, by Jian W. Liu, Staff Utilities Engineer, in the accompaniment of Frank Martinez Jr. for the Company.

The facilities consist of four wells, producing approximately 330 gallons per minute ("GPM"). The system also has six storage tanks, and a distribution system serving 296 customers during the test year. Detailed plant facility descriptions follow:

Well Data

ADWR ID No.	Pump HP	Pump GPM	Casing Size(in) & Depth(ft)	Meter Size(in)	Year Drilled
55-619218	15	90	8 and 825	3	1971
55-619219	15	50	8 and 557	3	1978
55-561217	15	90	8 and 650	3	1980
55-558536	25	100	12 and 710	3	1996
Total		330			

Note: HP = Horsepower

Storage Tanks, Pressure Tanks and Booster Pumps

Storage Tanks		Pressur	e Tanks	Booster Pumps		
Capacity (gallons)	Quantity	Capacity (gallons)	Quantity	Capacity (HP)	Quantity	
15,000	1	5,000	1	5	1	
35,000	2	3,000	1	10	5	
10,000	2	10,000	1			
165,000	1					
Total 270,000	6					

Mains, Meters and Fire Hydrants

Ma	ins	Customer Meters		Customer Meters Fire		
Size (inches)	Length (feet)	Size (inches)	Quantity	Quantity		
		5/8x3/4	324	None		
4	1,800	3/4				
6	4,800	1	2			
		1.5				
		2	1			
		Total	327			

Water System Analysis

Staff concludes that the Chaparral water system has adequate production capacity and storage capacity to serve the existing customer base and reasonable growth.

C. WATER USE

Water Sold

Based on the information provided by Chaparral, water use for the test year is presented in Figure C-1. Customer consumption experienced a high monthly average water use of 496 gallons per day ("GPD") per connection and a low monthly average water use of 196 GPD per connection and an average annual use of 344 GPD per connection.

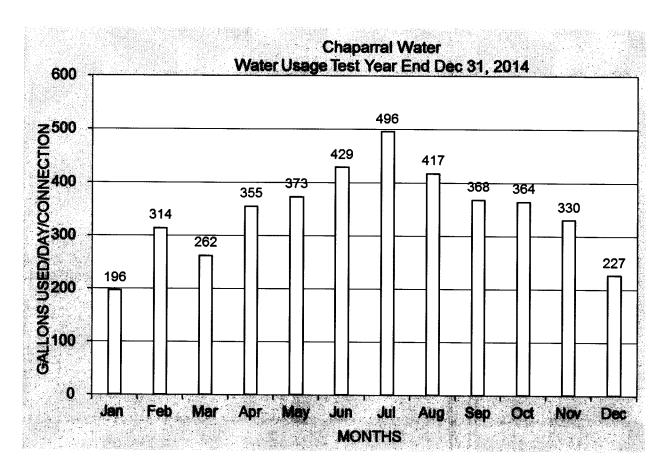


Figure C-1. Water Use

Non-Account Water

Non-account water should be 10% or less and never more than 15 percent. It is important to be able to reconcile the difference between water sold and the water produced by the source. A water balance will allow a water company to identify water and revenue losses due to leakage, theft, and flushing. The Company reported 38,720,000 gallons pumped and 37,439,000 gallons sold, resulting in a water loss of 3.31 percent for the test year. Non-account water is within acceptable limits.

D. GROWTH

There were 325 service connections in 2004. Chaparral had 296 customers at the end of the test year of 2014. The Company anticipates little or no growth in the next 3 to 5 years.

E. ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY ("ADEQ") COMPLIANCE

Compliance

ADEQ or its formally delegated agent, the Maricopa County Environmental Services Department ("MCESD"), reported that the Chaparral drinking water system, Public Water System ("PWS") No. 07-064, is currently delivering water that meets water quality standards required by 40 C.F.R. 141 (National Primary Drinking Water Regulations) and Arizona Administrative Code, Title 18, Chapter 4. (MCESD report dated October 28, 2015).

Water Testing Expense

The Company is subject to mandatory participation in the Monitoring Assistance Program ("MAP"). Participation in the MAP program is mandatory for water systems, which serve less than 10,000 persons (approximately 3,300 service connections).

The Company reported its water testing expense at \$2,743 during the test year. Staff has reviewed and recalculated these expenses. Table A shows Staff's annual monitoring expense estimated at \$2,804 including the MAP Fee. Staff recommends annual water testing expense of \$2,804 be used for purposes of this application.

Monitoring PWS#07-064 (Tests per 3 years, unless noted.) For 4 wells	Cost per test	No. of tests per 3 years	Total 3 year cost	Annual Cost
Total Coliform – monthly	\$20	36x4	720x4	\$960
Inorganics	\$90	6x4	\$540x4	\$720
Nitrates – annual	\$25	3x4	\$75x4	\$100
MAP fees (annual)				\$1,024 (rounded)
Total				\$2,804

Table A Water Testing Expense

F. ARIZONA DEPARTMENT OF WATER RESOURCES ("ADWR") COMPLIANCE

Chaparral's service area is located in the ADWR Phoenix Active Management Area ("AMA") and is subject to ADWR AMA reporting and conservation requirements. ADWR reported that the Company is not in compliance with departmental requirements governing water providers and/or community water systems. (ADWR compliance status report dated November 24, 2015).

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Staff recommends that any increase in rates and charges approved in this proceeding not become effective until the first day of the month following the Company's filing of an updated ADWR Compliance Status Report indicating that the Company is in compliance with ADWR requirements.

G. ACC COMPLIANCE

A check with the ACC Utilities Division Compliance Section showed no delinquent compliance items for the Company. (Compliance Section email dated December 9, 2015)

H. DEPRECIATION RATES

In the prior rate case, the Company adopted Staff's typical and customary water depreciation rates. These rates are presented in Table H-1 and it is recommended that the Company continue to use these depreciation rates by individual National Association of Regulatory Utility Commissioners category.

I. CURTAILMENT PLAN AND BACKFLOW PREVENTION TARIFFS

The Company has approved Curtailment Plan and Backflow Prevention Tariffs on file with the Commission.

J. SERVICE LINE AND METER INSTALLATION CHARGES

The Company has proposed changes to its service line and meter installation charges for meters that are 2-inches and larger (8-inch and larger meters are still priced at cost). These charges are refundable advances and the Company's proposed charges are within Staff's recommended range for these charges. Staff recommends acceptance of the Company proposed charges in Table K-1.

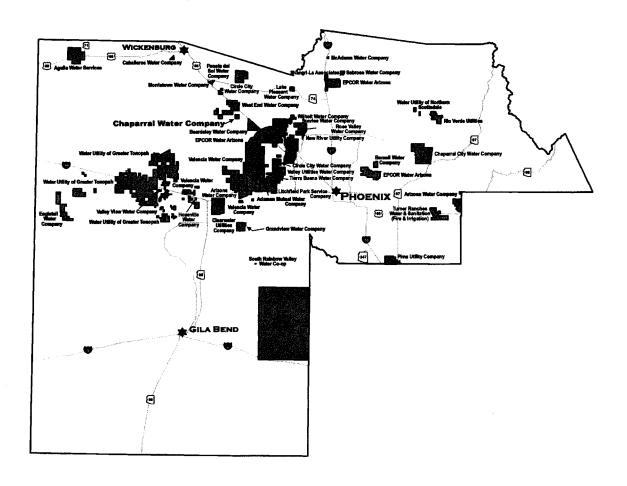
Table K-1. Service Line and Meter Installation Charges

Meter Sizes	Current Service Line Charges	Current Meter Charges	Current Total Charges	Company Proposed Service Line Charges	Company Proposed *Meter Charges	Company Proposed Total Charges
5/8" x 3/4"	\$445	\$155	\$600	\$445	\$155	\$600
3/4"	\$445	\$255	\$700	\$445	\$255	\$ 700
1"	\$495	\$315	\$810	\$495	\$315	\$810
1-1/2"	\$550	\$525	\$1,075	\$550	\$525	\$1, 075
2"	\$880	\$1,095	\$1,975	\$830	\$1,890	\$2,720
3"	\$1,100	\$1,700	\$2,800	\$1,165	\$2,545	\$3,710
4"	\$1,58 0	\$2,770	\$4,350	\$1,67 0	\$3,645	\$5,315
6"	\$2,410	\$5,440	\$7,850	\$2,330	\$6,920	\$9,250
8-inch & Larger	At Cost	At Cost	At Cost	At Cost	At Cost	At Cost

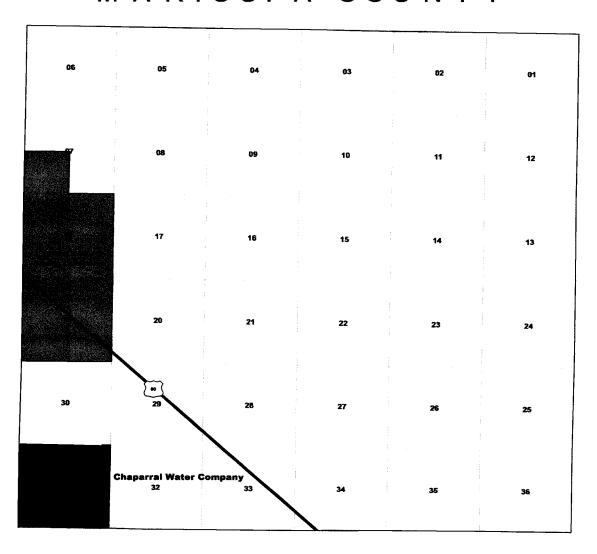
^{*}Notes:

¹⁾ Meter charge includes meter box or vault.

MARICOPA COUNTY



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A-2. Certificated Area

Table H-1. Depreciation Rates

NARUC		Average	Annual
Acct. No.	Depreciable Plant	Service Life	Accrual Rate
		(Years)	(%)
304	Structures & Improvements	30	3.33
305	Collecting & Impounding Reservoirs	40	2.50
306	Lake, River, Canal Intakes	40	2.50
307	Wells & Springs	30	3.33
308	Infiltration Galleries	15	6.67
309	Raw Water Supply Mains	50	2.00
310	Power Generation Equipment	20	5.00
311	Pumping Equipment	8	12.5
320	Water Treatment Equipment		
320.1	Water Treatment Plants	30	3.33
320.2	Solution Chemical Feeders	5	20.0
330	Distribution Reservoirs & Standpipes		
330.1	Storage Tanks	45	2.22
330.2	Pressure Tanks	20	5.00
331	Transmission & Distribution Mains	50	2.00
333	Services	30	3.33
334	Meters	12	8.33
335	Hydrants	50	2.00
336	Backflow Prevention Devices	15	6.67
339	Other Plant & Misc Equipment	15	6.67
340	Office Furniture & Equipment	15	6.67
340.1	Computers & Software	5	20.00
341	Transportation Equipment	5	20.00
342	Stores Equipment	25	4.00
343	Tools, Shop & Garage Equipment	20	5.00
344	Laboratory Equipment	10	10.00
345	Power Operated Equipment	20	5.00
346	Communication Equipment	10	10.00
347	Miscellaneous Equipment	10	10.00
348	Other Tangible Plant	10	10.00